Amendments to the Claims

Claims 1-11 (Cancelled)

- 12. (Previously Presented) A method for managing a broadband modern, comprising: transmitting a discovery signal over a connection; entering a connect state in response to receiving a discovery acknowledge signal; recording a media access control (MAC) address corresponding to the broadband modern, the broadband modern to transmit the discovery acknowledge signal in response to the discovery signal; and transmitting a terminate message to other broadband moderns connected to the connection.
- 13. (Previously Presented) The method of claim 12, further comprising specifying data formats supported in the discovery signal.
- 14. (Previously Presented) The method of claim 12, further comprising recording a data format selected by the broadband modern in the discovery acknowledge signal.
- 15. (Currently Amended) The method of claim_12, further comprising: sending a poll message to the broadband modem; and entering a disconnect state if a poll acknowledge message is not received in response to the poll message within a predefined period of time.
- 16. (Previously Presented) The method of claim 12, further comprising transmitting a sleep message to the broadband modem indicating that its binding client system is about to enter into a sleep state.

- 17. (Currently Amended) A method for managing a broadband modem, comprising: transmitting a discovery acknowledge signal over a transmission medium in response to receiving a discovery signal from a first client computer system;
 - forwarding asynchronous transfer mode (ATM) ATM cells between the first client computer system and an asymmetrical digital subscriber line (ADSL) ADSL;

generating and verifying a header error control (HEC) field in the ATM_cells-cell; entering a sleep state and disabling an activity timer upon receiving a sleep message from the first client computer system,

- entering a connect state upon receiving a wake-up event from a second client computer system; and
- entering a disconnect state if the a poll message is not received from the first client computer system within the a predetermined period of time.
- 18. (Previously Presented) The method of claim 17, further comprising specifying a data format supported by the broadband modern among data formats specified in the discovery signal.
- 19. (Currently Amended) The method of claim 17, further comprising: transmitting a poll acknowledge message in response to receiving the poll message; and
 - entering the disconnect state if the poll message is not received within a the predetermined period of time.

Claims 20-23 (Cancelled)

24. (Currently Amended) A machine-readable medium having stored thereon date

data including sets of instructions which, when executed by a machine, cause the
machine to:

transmit a discovery signal over a connection;

connection.

enter a connect state in response to receiving a discovery acknowledge signal; record a media access control (MAC)MAC address corresponding to the a broadband modem, the broadband modem to transmit the discovery acknowledge signal in response to the discovery signal; and transmit a terminate message to other broadband modems connected to the

- 25. (Previously Presented) The machine-readable medium of claim 24, wherein the sets of instructions which, when executed by the machine, further cause the machine to specify data formats supported in the discovery signal.
- 26. (Previously Presented) The machine-readable medium of claim 24, wherein the sets of instructions which, when executed by the machine, further cause the machine to record a data format selected by the broadband modem in the discovery acknowledge signal.
- 27. (Original) The machine-readable medium of claim 24, wherein the sets of instructions which, when executed by the machine, further cause the machine to: send a poll message to the broadband modem; and

enter a disconnect state if a poll acknowledge message is not received in response to the poll message within a predefined period of time.

Claims 28-29 (Cancelled)

- 30. (Currently Amended) A method for establishing an <u>asynchronous transfer mode</u>
 (ATM) ATM signal for transmitting an ATM cell from a first computer system to a second computer system, comprising:
 - transmitting the ATM cell from the first computer system to a given one of a plurality of broadband modems, the plurality of broadband modems configured to operate as peripherals;
 - transmitting a discovery signal from the second computer system to the plurality of broadband moderns;
 - the given one of the plurality of broadband modems transmitting a discovery acknowledge signal to the second computer system in response to the discovery signal to establish a binding between the second computer system and the given one of the plurality of broadband modems; and the second computer system entering into a connect state with the given one of the plurality of broadband modems to accept the ATM cell from the given broadband modem.
- 31. (Previously Presented) The method of claim 30, further comprising specifying data formats supported in the discovery signal.
- 32. (Currently Amended) A machine-readable medium having stored thereon data including sets of instructions which, when executed by a machine, cause the machine to:

transmit a discovery signal over a connection;

transmit an asynchronous transfer mode (ATM) the ATM cell from a first

computer system to a given one of a plurality of broadband modems, the

plurality of broadband modems configured to operate as peripherals; and

- transmit a discovery signal from a second computer system to the plurality of broadband modems;
- the given one of the plurality of broadband moderns transmit a discovery acknowledge signal to the second computer system in response to the discovery signal to establish a binding between the second computer system and the given one of the plurality of broadband moderns; and the second computer system enter into a connect state with the given one of the plurality of broadband moderns to accept the ATM cell from the given broadband modern.
- 33. (Previously Presented) The machine-readable medium of claim 32, wherein the sets of instructions which, when executed by the machine, further cause the machine to specify data formats supported in the discovery signal.
- 34. (Previously Presented) The machine-readable medium of claim 32, wherein the sets of instructions which, when executed by the machine, further cause the machine to record a data format selected by the given one of the plurality of broadband modems in the discovery acknowledge signal.
- 35. (Previously Presented) The method of claim 30, further comprising recording a data format selected by the given one of the plurality of broadband modems in the discovery acknowledge signal.
- 36. (Currently Amended) A system for establishing an <u>asynchronous transfer mode</u>
 (ATM) ATM-signal for transmitting an ATM cell from a first computer system to a second computer system, comprising:
 - the first computer system to transmit the ATM cell to a given one of a plurality of broadband modems, the plurality of broadband modems configured to operate as peripherals;

- the second computer system coupled to the first computer system, the second computer system to transmit a discovery signal to the plurality of broadband moderns;
- the given one of the plurality of broadband modems to transmit a discovery acknowledge signal to the second computer system in response to the discovery signal to establish a binding between the second computer system and the given one of the plurality of broadband modems; and the second computer system to enter into a connect state with the given one of the plurality of broadband modems to accept the ATM cell from the given broadband modem.
- 37. (Previously Presented) The system of claim 36, wherein data formats supported in the discovery signal are specified.
- 38. (Previously Presented) The system of claim 36, wherein a data format selected by the broadband modem in the discovery acknowledge signal is recorded.
- 39. (Currently Amended) A system for managing a broadband modem, comprising:
 the broadband modem to
 - transmit a discovery acknowledge signal over a transmission medium in response to receiving a discovery signal from a first client computer system;
 - forward asynchronous transfer mode (ATM) ATM cells between the first client computer system and an asymmetrical digital subscriber line (ADSL)ADSL;
 - generate and verifying a header error control (HEC) field in the ATM cellseell;

- enter a sleep state and disable disabling an activity timer upon receiving a sleep message from the first client computer system;
- enter a connect state upon receiving a wake-up event from a second client computer system; and
- enter a disconnect state if the a poll message is not received from the first client computer system within the a predetermined period of time.
- 40. (Previously Presented) The system of claim 39, wherein data formats supported in the discovery signal are specified.
- 41. (Previously Presented) The system of claim 39, wherein a data format selected by the broadband modem in the discovery acknowledge signal is recorded.